Effect of using turmeric plant powder (*Curcuma longa*) in the diet on productive performance and some physiological traits of broiler

Ali Jawad Razooqi Osama Ahmed latif College of Agric., Diyala University

ABSTRACT

This research was conducted in poultry field which dependent for College of Agriculture/ Kirkuk University for a period of six weeks, starting 10/1/2015 to 25/2/2015 using 300 chick meat of hybrids Ross 308 commercial one day - old ,

have been distributed randomly on the four treatments and by three replicates

per treatment and 25 birds per replicate and fed starter diet for the first 3 weeks of the experiment contains 21% crude protein and 3049 Kcal / kg feed metabolizable energy and grower diet for 3 second weeks of the experiment containing 19.05% crude protein and 3095 Kcal / kg feed metabolizable energy as control treatment (without any addition). The use of four types of diets are: control treatment (Tc) and the first treatment (T1) contain 0.25 % turmeric plant

powder ($250~\mbox{g}$ / $100~\mbox{kg}$ of diet) and the second treatment (T2) contain 0.50%

turmeric plant powder (500g/100kg of diet) and the third-treatment (T3) cont-

aining 1% turmeric plant powder (1000g / 100kg of diet). The results showed no significant effect of turmeric powder on body weight, feed consumption, feed conversion ratio during the first three weeks of age birds, while there significant superiority at the end of the experiment at 6 weeks of age birds with added turmeric powder in treatments, where led to an improvement in body weight and the coefficient of feed conversion and weight of the link femoral and wings and gizzard and the real stomach, and appear an inprovement in amount of hemoglobin and PCV and glucose and lower the amount of uric acid and cholesterol in the blood of birds When increasing turmeric powder in ration of broiler.

Key words: turmeric plant powder, physical and chemical blood traits, broiler.